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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/666,126

09/22/2003

Juergen Bieber

Q76578

8420

23373

7590

10/13/2004

SUGHRUE MION, PLLC
2100 PENNSYLVANIA AVENUE, N.W.
SUITE 800
WASHINGTON, DC 20037

EXAMINER

BARNES, CRYSTAL J

ART UNIT

PAPER NUMBER

2121

DATE MAILED: 10/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/666,126

Applicant(s)

BIEBER, JUERGEN

Examiner

Crystal J. Barnes

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2121

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-49 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19, 40-45, 48 and 49 is/are rejected.
- 7) ☒ Claim(s) 20-39, 46 and 47 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>2/12/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The following is an initial Office Action upon examination of the above-identified application on the merits. Claims 1-49 are pending in this application.

Priority

2. Applicant has not complied with one or more conditions for receiving the benefit of an earlier filing date under 35 U.S.C. 120 as follows:

The later-filed application must be an application for a patent for an invention which is also disclosed in the prior application (09/812205, the parent or original nonprovisional application or provisional application); the disclosure of the invention in the parent application and in the later-filed application must be sufficient to comply with the requirements of the first paragraph of 35 U.S.C. 112.

See Transco Products, Inc. v. Performance Contracting, Inc., 38 F.3d 551, 32 USPQ2d 1077 (Fed. Cir. 1994).

3. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

4. The information disclosure statement (IDS) submitted on 12 February 2004 is being considered by the examiner.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claim 45 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

7. Claim 45 recites the limitation "the monitoring block" in line 1 of the claim. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 1-19, 40 and 41 are rejected under 35 U.S.C. 102(e) as being anticipated by USPN 6,457,040 B1 to Mizuhara et al.

As per claim 1, the Mizuhara et al. reference discloses a method for at least one of operating and observing a device for monitoring at least one control device that is coupled with a plant, comprising: utilizing at least one connected remote operator unit (see column 10 lines 4-14, "data terminals 11-13") that communicates with the monitoring device ("server computer 15"); and providing a function block (see column 12 lines 32-38, "application function conversion section 153") which intervenes as an interface module (see column 12 lines 59-63, "application function interface section 1532, converting communication section 1533") in communications ("communication") between the monitoring device ("server computer 15") on the one hand and the connected operator unit ("data terminals 11-13") on the other hand, which evaluates information addressed (see column 12 lines 32-38, "data processing section for respective terminals 1531") to the connected operator unit ("data terminals 11-13"), and which processes the information (see column 13 lines 3-7,

"terminal data management section 1534") such that the connected operator unit ("data terminals 11-13") directly displays the information as a terminal ("data terminals 11-13").

As per claim 2, the Mizuhara et al. reference discloses the function block (see column 10 lines 33-38, "application function conversion section 153") is provided in the monitoring device (see column 10 lines 21-27, "server computer 15").

As per claim 3, the Mizuhara et al. reference discloses the function block (see column 10 lines 33-38, "application function conversion section 153") is provided in a device external (see column 10 lines 61-64, "respective functions can be distributed") to but connected to the monitoring device (see column 10 lines 21-27, "server computer 15").

As per claim 4, the Mizuhara et al. reference discloses the function block ("application function conversion section 153") comprises a software program (see column 12 lines 55-58, column 13 lines 8-10, "software").

As per claim 5, the Mizuhara et al. reference discloses the function block (see column 10 lines 33-38, "application function conversion section 153") intervenes between a monitoring function block ("application function conversion

section 153") of the monitoring device (see column 10 lines 21-27, "server computer 15") and the connected operator unit ("data terminals 11-13").

As per claim 6, the Mizuhara et al. reference discloses the interfacing function block ("application function interface section 1532, converting communication section 1533") performs, at least partially, operator unit functions (see column 12 lines 47-53, "performing a communication through a suitable system").

As per claim 7, the Mizuhara et al. reference discloses the operator unit functions (see column 12 lines 47-53, "performing a communication through a suitable system") comprise operator unit program steps (see column 12 lines 51-53, 59-63, column 13 lines 1-7, "application service supply section 154, application function interface section 1532, converting communication section 1533, data processing section for respective terminals 1531, terminal data management section 1534").

As per claim 8, the Mizuhara et al. reference discloses for execution, the interfacing function block ("converting communication section 1533") comprises an additional program part (see column 14 lines 57-63, "data format conversion

section 1533c") loaded at least partially into a working memory ("basic structured document memory section 1533e") of the monitoring device ("server computer 15").

As per claim 9, the Mizuhara et al. reference discloses for execution, the interfacing function block ("converting communication section 1533") comprises an additional program part (see column 14 lines 57-63, "data format conversion section 1533c") loaded at least partially into a working memory ("basic structured document memory section 1533e") of the monitoring device ("server computer 15").

As per claim 10, the Mizuhara et al. reference discloses the interfacing function block ("application function conversion section 153") is configured to be multiply addressed by at least the connected operator unit ("data terminals 11-13"), to execute individual computations (see column 12 lines 26-32, "attribute used by WWW and non-programmable terminal") associated with the addressing operator unit ("data terminals 11-13"), and to store the computation results ("attribute used by WWW and non-programmable terminal") in a uniquely assigned manner in the addressing operator unit ("data terminals 11-13").

As per claim 11, the Mizuhara et al. reference discloses the interfacing function block ("application function conversion section 153") is configured to be multiply addressed by at least the connected operator unit ("data terminals 11-13"),

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to execute individual computations (see column 12 lines 26-32, "attribute used by WWW and non-programmable terminal") associated with the addressing operator unit ("data terminals 11-13"), and to store the computation results ("attribute used by WWW and non-programmable terminal") in a uniquely assigned manner in the addressing operator unit ("data terminals 11-13").

As per claim 12, the Mizuhara et al. reference discloses the interfacing function block ("application function conversion section 153"), is configured to be multiply addressed by plural, differing operator units ("data terminals 11-13"), to execute individual computations (see column 12 lines 26-32, "attribute used by WWW and non-programmable terminal") associated respectively with the plural operator units ("data terminals 11-13"), and to store the computation results ("attribute used by WWW and non-programmable terminal") in a uniquely assigned manner in the respective operator units ("data terminals 11-13").

As per claim 13, the Mizuhara et al. reference discloses the interfacing function block (see column 10 lines 33-38, "application function conversion section 153") individually addresses a plurality of connected remote operator units ("data terminals 11-13").

As per claim 14, the Mizuhara et al. reference discloses the interface function block (see column 12 lines 32-35, "application function conversion section 153") is configured to be addressed with differing parameters (see column 12 lines 35-38, "data processing section for respective terminals 1531") of the monitoring device ("server computer 15"), in order to access the plurality of operator units ("data terminals 11-13") individually.

As per claim 15, the Mizuhara et al. reference discloses the interface function block (see column 10 lines 21-27, "application function conversion section 153") is addressed by at least one of monitoring logic and a monitoring program ("FDD 19, HDD 20, CD-ROM 21") of the monitoring device ("server computer 15").

As per claim 16, the Mizuhara et al. reference discloses the differing parameters ("data processing section for respective terminals 1531") comprise device addresses (see column 13 lines 3-7, "detailed data").

As per claim 17, the Mizuhara et al. reference discloses communication between the interfacing function block (see column 12 lines 59-63, "converting communication section 1533, application function interface section 1532") and the monitoring function block ("application function conversion section 153") of the monitoring device ("server computer 15") is combined in one channel (see figure 4).

As per claim 18, the Mizuhara et al. reference discloses the interfacing function block (see column 12 lines 59-63, "converting communication section 1533, application function interface section 1532") comprises a plurality of channels (see figure 4) for communicating with a plurality of monitoring function blocks (see column 13 lines 13-16, "application function conversion section 153, data processing section for the respective terminals 1531").

As per claim 19, the Mizuhara et al. reference discloses the interfacing function block ("converting communication section 1533, application function interface section 1532") comprises a plurality of channels (see column 10 lines 61-64, "respective functions can be distributed") for communicating with a plurality of monitoring devices ("server computer 15").

As per claim 40, the Mizuhara et al. reference discloses a transmission data format (see column 14 lines 41-44, "common structured language format") used in communicating between the operator units ("terminals") and the interfacing function block ("data form conversion section 1533c") utilizes a standard data protocol (see column 14 lines 53-56, "common structured language format").

As per claim 41, the Mizuhara et al. reference discloses the operator units (see column 10 lines 4-11, "data terminals 11, 12, 13") are provided with, in addition

to an operating system ("smart-phone, PDA, PC"), a program for at least one of displaying (see column 12 lines 29-32, "display size and display capacity") and analyzing data received from the interfacing function block ("application function conversion section 153").

10. Claims 42, 43, 45 and 49 are rejected under 35 U.S.C. 102(e) as being anticipated by EP 825506 A2 to THIBAULT et al.

As per claim 42, the THIBAULT et al. reference discloses an assembly comprising at least one controller (see column 3 lines 51-54, "control stations 23a-23e") coupled into an industrial plant (see column 3 lines 44-50, "process control apparatus 19a-19e"); a monitoring device (see column 3 lines 37-39, "server digital data processor 16") and operator units (see column 3 lines 33-36, "client digital data processor 12, 14") remote ("network 18") from and communicating with the monitoring device ("server digital data processor 16"), configured to monitor the at least one controller ("control stations 23a-23e"); and an interface function block (see columns 6-7 lines 57-2, "command processor front end 25a") coupled as an interface module ("information server 20") into communication ("establish communication") between the monitoring device ("server digital data processor 16")

and the operator units ("client digital data processor 12, 14"), and configured to analyze information addressed (see column 7 lines 10-14, "responds to information") respectively to the operator units ("client digital data processor 12, 14") and to process the information (see column 7 lines 10-14, "transmitting that information to applets 26, 28") such that the respective operator units ("client digital data processor 12, 14") display the processed information as a terminal (see column 8 lines 2-3, "display to an operator").

As per claim 43, the THIBAULT et al. reference discloses the interface function block ("command processor front end 25a") is incorporated into the monitoring device ("server digital data processor 16").

As per claim 45, the THIBAULT et al. reference discloses the monitoring block ("server digital data processor 16, command processor 25") comprises a monitoring function block (see columns 5-6 lines 57-5, "object manager 25c").

As per claim 49, the THIBAULT et al. reference discloses further comprising a plurality of monitoring function blocks (see column 5 lines 51-56, "object manager functionality"), wherein the interface function block ("command processor front end 25a") comprises a plurality of channels (see column 6 lines 38-

40, "bus structure 30") for communicating respectively with the plurality of monitoring function blocks ("object manager functionality").

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 44 and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 825506 A2 to THIBAULT et al. in view of logical reasoning.

As per claim 44, the THIBAULT et al. reference does not expressly disclose the interface function block is external to the monitoring device.

However, it would have been logical for one of ordinary skill in the art would have been motivated to distribute the functions of the command processor of the server digital data processor into a plurality of processors.

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the server digital data processor by

distributing the front end, the interface section and the object manager of the command processor into a plurality of processors externally coupled to one another.

One of ordinary skill in the art would have been motivated to modify the server digital data processor into a plurality of processors externally coupled to one another to facilitate upgrading, removing, and/or replacing any or all functions of the command processor with ease.

As per claim 48, the THIBAULT et al. reference does not expressly disclose further comprising additional monitoring devices, wherein the interface function block comprises a plurality of channels for communicating respectively with the plurality of monitoring devices.

However, it would have been logical for one of ordinary skill in the art would have been motivated to distribute the functions of the server digital data processor into a plurality of processors.

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the server digital data processor by supplying

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a server digital data processor in communication with each control station individually.

One of ordinary skill in the art would have been motivated to modify the server digital data processor by supplying a server digital data processor in communication with each control station individually depending on the size and capacity necessary to manage and oversee each control station.

Allowable Subject Matter

13. Claims 20-39, 46 and 47 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following references are cited to further show the state of the art with respect to remote process control in general:

USPN 4,303,973 to Williamson, Jr. et al.

USPN 5,325,287 to Spahr et al.

USPN 5,689,671 to Strömberg

USPN 6,389,461 B1 to Shah

USPN 6,678,737 B1 to Bucher

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Crystal J. Barnes whose telephone number is 703.306.5448 or 571.272.3679 after 14 October 2004. The examiner can normally be reached on Monday-Friday alternate Mondays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Knight can be reached on 703.308.3179 or 571.272.3687 after 14 October 2004. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CJB
7 October 2004



Anthony Knight
Supervisory Patent Examiner
Group 3600